238

Met Asn Thr

1

703-905-2500

SEQUENCE LISTING

| <110> | Farwick, Mike | |
|-------|---|-----|
| | Huthmacher, Klaus | |
| | Marx, Achim | |
| | Pfefferle, Walter | |
| <120> | New Nucleotide Sequences Which Code for the menE Gene | |
| <130> | 21123/280112 | |
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| <141> | 2001-04-16 | |
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| <170 | PatentIn version 3.0 | |
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tagogocaca acteogaatt etgaaccate ggoactagaa totoggaat atg aat act

| cgc Arg | gtc Val 5 | ctç Leu | gaa Glu | gca Ala | cta Leu | cct Pro 10 | gtt Val | gat Asp | ctt Leu | gca Ala | gat Asp 15 | ecc Pro | acc Thr | gca Ala | att Ile | 286 |
|---------------------|-------------------|---------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------------|--------------------|-------------------|-----|
| ctg Leu 20 | gga Gly | gat Asp | ctc Leu | gag Glu | gac Asp 25 | gca Ala | atc Ile | tct Ser | GJÀ ààà | aag Lys 30 | aaa Lys | act Thr | ttc Phe | ctc Le u | ccc pro 35 | 334 |
| atc Ile | cct Pro | gta Val | caa Gln | gat Asp 40 | aaa Lys | acc Thr | cgt Arg | gca Ala | cag Gln 45 | ttg Leu | ctg Leu | cgc Arg | gat Asp | tct Ser 50 | caa Gln | 382 |
| cga Arg | gtt Val | ggc Gly | ctc Leu 55 | gcc Ala | atc Ile | gat Asp | cct Pro | tcg Ser 60 | atc Ile | gct Ala | ttg Leu | gtg Val | atg Met 6 5 | gcc Ala | act Thr | 430 |
| tot Ser | ggt Gly | tct Ser 70 | aca Thr | ggt Gly | acc Thr | ccg Pro | aag Lys 75 | ggc Gly | gct Ala | cag Gln | ctc Leu | act Thr 80 | ecg Pro | ttg Leu | aat Asn | 478 |
| tt g Leu | gtg Val 85 | agt Ser | tcc Ser | gcc Ala | gat Asp | gct Ala 90 | acg Thr | cat His | cag Gln | ttt Phe | tta Leu 95 | ggt | ggc Gly | gaa Glu | Gly | 526 |
| cag Gln 100 | tgg Trp | ttg L e u | ctt Leu | gcc Ala | atg Met 105 | cca Pro | gca Ala | cac His | cac His | att Ile 110 | gca Ala | ggc | atg Met | cag Gln | gtg Val 115 | 574 |
| ctt L e u | ctt Leu | cga Arg | agc Ser | ctc Leu 120 | att Ile | gct Ala | gga Gly | gtt Val | gag Glu 125 | cca Pro | cta Leu | get Ala | att Ile | gat Asp 130 | ctc Leu | 622 |
| agc Ser | aca Thr | ggt Gly | ttt Phe 135 | cac His | att Ile | gac Asp | gct Ala | ttc Phe 140 | gca Ala | ggc | gcc Ala | gcg Ala | gca Ala 145 | gaa Glu | ctg Leu | 670 |
| aaa Lys | aat Asn | acc Thr 150 | ggc Gly | gac Asp | ege Arg | gtc Val | tat Tyr 155 | aca Thr | tcc Ser | ttg Leu | act Thr | cca Pro 160 | atg Met | cag Gln | tta Leu | 718 |
| ctt Leu | aaa Lys 165 | Ala | Met | Asp | tcc Ser | Г¢й | Gln | Gly | att Ile | gaa Glu | gcc Ala 175 | ctg Leu | aaa Lys | ctt Leu | ttt Phe | 766 |
| gat Asp 180 | Val | att Ile | ctt Leu | gtt Val | ggc Gly 185 | ggt Gly | gct Ala | gca Ala | tt g Leu | tct Ser 190 | Lys | cag Gln | gcc Ala | cga Arg | att Ile 195 | 814 |
| tct Ser | gcg Ala | gag Glu | cag Gln | cta Leu 200 | gac Asp | atc Ile | aac Asn | att Ile | gtc Val 205 | acc Thr | acc Thr | tac Tyr | ggc Gly | ser 210 | tca Ser | 862 |
| gag Glu | act Thr | tca Ser | ggt Gly 215 | Gly | tgc Cys | gtt Val | tat Tyr | gat Asp 220 | Gly | aag Lys | Pro | att Ile | ccc Pro 225 | Gly | gcg | 910 |

| aaa gtc cgt att tcg gat gag cgc att gag ttg ggt ggc ccg atg att Lys Val Arg Ile Ser Asp Glu Arg Ile Glu Leu Gly Gly Pro Met Ile 230 235 240 | 958 | | | | | | | | | |
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| geg cag ggc tac aga aat gca cct gaa cat ccg gat ttc gcc aac gag Ala Gln Gly Tyr Arg Asn Ala Pro Glu His Pro Asp Phe Ala Asn Glu 245 250 255 | 1006 | | | | | | | | | |
| ggt tgg ttt acc acc tct gat tca ggt gaa ctc cac gac ggg att ctc Gly Trp Phe Thr Thr Ser Asp Ser Gly Glu Leu His Asp Gly Ile Leu 260 275 | 1054 | | | | | | | | | |
| acc gtg act ggt cgc gtg gat acc gtc att gat tcc ggt gga ttg aag Thr Val Thr Gly Arg Val Asp Thr Val Ile Asp Ser Gly Gly Leu Lys 280 285 290 | 1102 | | | | | | | | | |
| ttg cac cca gag gta ctg gaa cgt gcc atc gca gat att aaa ggt gtc Leu His Pro Glu Val Leu Glu Arg Ala Ile Ala Asp Ile Lys Gly Val 295 300 305 | 1150 | | | | | | | | | |
| acc gcg gcg tgt gtt gtg ggt att ccc gat ccc cga tta ggc caa gca Thr Ala Ala Cys Val Val Gly Ile Pro Asp Pro Arg Leu Gly Gln Ala 310 315 320 | 1198 | | | | | | | | | |
| att gtg gcc gcg tac tcc gga tcg atc agt ccg tct gaa gtt att gaa Ile Val Ala Ala Tyr Ser Gly Ser Ile Ser Pro Ser Glu Val Ile Glu 325 330 335 | 1246 | | | | | | | | | |
| ggc ctc gac gat cta cct cgt tgg cag ctt ccc aaa cgg ctg aag cat Cly Leu Asp Asp Leu Pro Arg Trp Gln Leu Pro Lys Arg Leu Lys His 340 345 350 355 | 1294 | | | | | | | | | |
| ctg gaa tot ttg coc ago att ggt cot gga aaa got gat cga cgt got Leu Glu Ser Leu Pro Ser Ile Gly Pro Gly Lys Ala Asp Arg Arg Ala 360 365 370 | 1342 | | | | | | | | | |
| atc gcg aag ctg ttt tagtottoat tottgotgge tgcaactagt tttgocacat 139 Ile Ala Lys Leu Phe 375 | | | | | | | | | | |
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<213> Corynebacterium glutamicum

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Asp Ser Gln Arg Val Gly Leu Ala Ile Asp Pro Ser Ile Ala Leu Val 50 55 60

Met Ala Thr Ser Gly Ser Thr Gly Thr Pro Lys Gly Ala Gln Leu Thr 65 70 75 80

Pro Leu Asn Leu Val Ser Ser Ala Asp Ala Thr His Gln Phe Leu Gly 85 90 95

Gly Glu Gly Gln Trp Leu Leu Ala Met Pro Ala His His Ile Ala Gly 100 105 110

Met Gln Val Leu Leu Arg Ser Leu Ile Ala Gly Val Glu Pro Leu Ala 115 120 125

Ile Asp Leu Ser Thr Gly Phe His Ile Asp Ala Phe Ala Gly Ala Ala 130 135 140

Ala Glu Leu Lys Asn Thr Gly Asp Arg Val Tyr Thr Ser Leu Thr Pro 145 150 155 160

Met Gln Leu Leu Lys Ala Met Asp Ser Leu Gln Gly Ile Glu Ala Leu 165 170 175

Lys Leu Phe Asp Val Ile Leu Val Gly Gly Ala Ala Leu Ser Lys Gln 180 185 190

Ala Arg Ile Ser Ala Glu Gln Leu Asp Ile Asn Ile Val Thr Thr Tyr 195 200 205

Gly Ser Ser Glu Thr Ser Gly Gly Cys Val Tyr Asp Gly Lys Pro Ile 210 220

Pro Gly Ala Lys Val Arg Ile Ser Asp Glu Arg Ile Glu Leu Gly Gly 225 230 235 240

Pro Met Ile Ala Gln Gly Tyr Arg Asn Ala Pro Glu His Pro Asp Phe 245 250 255

Ala Asn Glu Gly Trp Phe Thr Thr Ser Asp Ser Gly Glu Leu His Asp 260 265 270

Gly Ile Leu Thr Val Thr Gly Arg Val Asp Thr Val Ile Asp Ser Gly 275 280 285

Gly Leu Lys Leu His Pro Glu Val Leu Glu Arg Ala Ile Ala Asp Ile 290 295 300

Lys Gly Val Thr Ala Ala Cys Val Val Gly Ile Pro Asp Pro Arg Leu 305 310 315 320

Gly Gln Ala Ile Val Ala Ala Tyr Ser Gly Ser Ile Ser Pro Ser Glu 325 330 335

Val Ile Glu Gly Leu Asp Asp Leu Pro Arg Trp Gln Leu Pro Lys Arg 340 345 350

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